

SEQUENCE LISTING

RMANN, Rosna

<110> RAPELLIER-LIBESKHAH

BANDARU, Raja

and 15418 Methods and Compositions of

<120> 69087, 15821, and Uses thereof
Human Proteins

<130> 10147-52U1

<140> Not Yet Assigned

<141> 2001-10-22

<150> US 60/242,428

<151> 2000-10-23

<150> US 60/241,884

<151> 2000-10-20

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<170> Patent In Ver. 2.1

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Gln	Arg	Arg	Ile	Ile	Asn	Glu	Glu	Pro	Lys	Phe	Glu	His	Lys	Asn	Phe

10044001 10044001 10044001

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Asn Ala Pro Thr Ile Asp Ile Ile Lys Gln Phe Leu Lys Lys Lys Ile		
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Asp Glu Arg Leu Gly Cys Lys Gly Asp Asp Pro Arg Lys His Glu Trp		
435	440	445
Phe Lys Ser Ile Asn Phe Ala Arg Leu Glu Ala Gly Leu Ile Asp Pro		
450	455	460
Pro Trp Val Pro Lys Pro Asn Val Val Tyr Ala Lys Asp Thr Gly Asp		
465	470	475
Ile Ala Glu Phe Ser Glu Ile Lys Gly Ile Glu Phe Asp Ala Lys Asp		
485	490	495
Glu Lys Phe Phe Lys Glu Phe Ser Thr Gly Ala Val Ser Ile Ala Trp		
500	505	510
Gln Lys Glu Met Ile Asp Thr Gly Leu Phe Asp Glu Leu Asn Asp Pro		
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Asn Arg Lys Glu Ser Ser Gly Gly Leu Asp Asp Asp Lys Lys Ser Gly		
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Thr Cys Thr Leu Leu		
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 35 40 45
 Phe Val Ile Glu Thr Ala Arg Gln Leu Lys Arg Ala His Gly Cys Phe
 50 55 60
 Pro Glu Gly Arg Ser Pro Pro Gly Ala Ala Ala Ser Ala Ala Ala Lys
 65 70 75 80
 Pro Pro Pro Leu Ser Ala Lys Asp Ile Leu Leu Gln Gln Gln Gln Gln
 85 90 95
 Leu Gly His Gly Gly Pro Glu Ala Ala Pro Arg Ala Pro Gln Ala Leu

100	105	110
Glu Arg Tyr Pro Leu Ala Ala Ala Ala Glu Arg Pro Pro Arg Leu Gly		
115	120	125
Ser Asp Phe Gly Ser Ser Arg Pro Ala Ala Ser Leu Ala Gln Pro Pro		
130	135	140
Thr Pro Gln Pro Pro Pro Val Asn Gly Ile Leu Val Pro Asn Gly Phe		
145	150	155
Ser Lys Leu Glu Glu Pro Pro Glu Leu Asn Arg Gln Ser Pro Asn Pro		
165	170	175
Arg Arg Gly His Ala Val Pro Pro Thr Leu Val Pro Leu Met Asn Gly		
180	185	190
Ser Ala Thr Pro Ala Ala Ala Ser Leu Gly Ser Ala Gln Pro Thr Asp		
195	200	205
Leu Gly Ala His Lys Arg Pro Ala Ser Val Ser Ser Ser Ala Ala Val		
210	215	220
Glu His Glu Gln Arg Glu Ala Ala Ala Lys Glu Lys Gln Pro Pro Pro		
225	230	235
Pro Ala His Arg Gly Pro Ala Asp Ser Leu Ser Thr Ala Ala Gly Ala		
245	250	255
Ala Glu Leu Ser Ala Glu Gly Ala Gly Lys Ser Arg Gly Ser Gly Glu		
260	265	270
Gln Asp Trp Val Asn Arg Pro Lys Thr Val Arg Asp Thr Leu Leu Ala		
275	280	285
Leu His Gln His Gly His Ser Gly Pro Phe Glu Ser Lys Phe Lys Lys		
290	295	300
Glu Pro Ala Leu Thr Ala Gly Arg Leu Leu Gly Phe Glu Ala Asn Gly		
305	310	315
Ala Asn Gly Ser Lys Ala Val Ala Arg Thr Ala Arg Lys Arg Lys Pro		
325	330	335
Ser Pro Glu Pro Glu Gly Glu Val Gly Pro Pro Lys Ile Asn Gly Glu		
340	345	350
Ala Gln Pro Trp Leu Ser Thr Ser Thr Glu Gly Leu Lys Ile Pro Met		

355	360	365
Thr Pro Thr Ser Ser Phe Val Ser Pro Pro Pro Thr Ala Ser Pro		
370	375	380
His Ser Asn Arg Thr Thr Pro Pro Glu Ala Ala Gln Asn Gly Gln Ser		
385	390	395 400
Pro Met Ala Ala Leu Ile Leu Val Ala Asp Asn Ala Gly Gly Ser His		
	405	410 415
Ala Ser Lys Asp Ala Asn Gln Val His Ser Thr Thr Arg Arg Asn Ser		
	420	425 430
Asn Ser Pro Pro Ser Pro Ser Ser Met Asn Gln Arg Arg Leu Gly Pro		
	435	440 445
Arg Glu Val Gly Gly Gln Gly Ala Gly Asn Thr Gly Gly Leu Glu Pro		
	450	455 460
Val His Pro Ala Ser Leu Pro Asp Ser Ser Leu Ala Thr Ser Ala Pro		
	465	470 475 480
Leu Cys Cys Thr Leu Cys His Glu Arg Leu Glu Asp Thr His Phe Val		
	485	490 495
Gln Cys Pro Ser Val Pro Ser His Lys Phe Cys Phe Pro Cys Ser Arg		
	500	505 510
Gln Ser Ile Lys Gln Gln Gly Ala Ser Gly Glu Val Tyr Cys Pro Ser		
	515	520 525
Gly Glu Lys Cys Pro Leu Val Gly Ser Asn Val Pro Trp Ala Phe Met		
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Gln Gly Glu Ile Ala Thr Ile Leu Ala Gly Asp Val Lys Val Lys Lys		
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<400> 23

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<210> 31

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<212> PRT

<213> Homo sapiens

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20 25 30

Pro Val Cys Arg Gly Cys Val Asn Tyr Glu Gly Ala Asp Arg Ile Glu
35 40 45

Phe Val Ile Glu Thr Ala Arg Gln Leu Lys Arg Ala His Gly Cys Phe
50 55 60

Gln Asp Gly Arg Ser Pro Gly Pro Pro Pro Pro Val Gly Val Lys Thr
65 70 75 80

Val Ala Leu Ser Ala Lys Glu Ala Ala Ala Ala Ala Ala Ala Ala
85 90 95

Ala Ala Ala Ala Ala Ala Gln Gln Gln Gln Gln Gln Gln Gln
100 105 110

Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Leu
115 120 125

Asn	His	Val	Asp	Gly	Ser	Ser	Lys	Pro	Ala	Val	Leu	Ala	Ala	Pro	Ser	
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Gly	Leu	Glu	Arg	Tyr	Gly	Leu	Ser	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	
145						150						155			160	
Ala	Ala	Ala	Ala	Val	Glu	Gln	Arg	Ser	Arg	Phe	Glu	Tyr	Pro	Pro	Pro	
			165						170						175	
Pro	Val	Ser	Leu	Gly	Ser	Ser	Ser	His	Thr	Ala	Arg	Leu	Pro	Asn	Gly	
			180						185						190	
Leu	Gly	Gly	Pro	Asn	Gly	Phe	Pro	Lys	Pro	Thr	Pro	Glu	Glu	Gly	Pro	
			195						200						205	
Pro	Glu	Leu	Asn	Arg	Gln	Ser	Pro	Asn	Ser	Ser	Ser	Ala	Ala	Ala	Ser	
210						215						220				
Val	Ala	Ser	Arg	Arg	Gly	Thr	His	Gly	Gly	Leu	Val	Thr	Gly	Leu	Pro	
225						230						235			240	
Asn	Pro	Gly	Gly	Gly	Gly	Gly	Pro	Gln	Leu	Thr	Val	Pro	Pro	Asn	Leu	
			245						250						255	
Leu	Pro	Gln	Thr	Leu	Leu	Asn	Gly	Pro	Ala	Ser	Ala	Ala	Val	Leu	Pro	
			260						265						270	
Pro	Pro	Pro	Pro	His	Ala	Leu	Gly	Ser	Arg	Gly	Pro	Pro	Thr	Pro	Ala	
275						280						285				
Pro	Pro	Gly	Ala	Pro	Gly	Gly	Pro	Ala	Cys	Leu	Gly	Gly	Thr	Pro	Gly	
290						295						300				
Val	Ser	Ala	Thr	Ser	Ser	Ser	Ala	Ser	Ser	Ser	Thr	Ser	Ser	Ser	Val	
305						310						315			320	
Ala	Glu	Val	Gly	Val	Gly	Ala	Gly	Gly	Lys	Arg	Pro	Gly	Ser	Val	Ser	
			325						330						335	
Ser	Thr	Asp	Gln	Glu	Arg	Glu	Leu	Lys	Glu	Lys	Gln	Arg	Asn	Ala	Glu	
			340						345						350	
Ala	Leu	Ala	Glu	Leu	Ser	Glu	Ser	Leu	Arg	Asn	Arg	Ala	Glu	Glu	Trp	
355						360						365				
Ala	Ser	Lys	Pro	Lys	Met	Val	Arg	Asp	Thr	Leu	Leu	Thr	Leu	Ala	Gly	
370						375						380				

Cys	Thr	Pro	Tyr	Glu	Val	Arg	Phe	Lys	Lys	Asp	His	Ser	Leu	Leu	Gly	385	390	395	400
Arg	Val	Phe	Ala	Phe	Asp	Ala	Val	Ser	Lys	Pro	Gly	Met	Asp	Tyr	Glu	405	410	415	
Leu	Lys	Leu	Phe	Ile	Glu	Tyr	Pro	Thr	Gly	Ser	Gly	Asn	Val	Tyr	Ser	420	425	430	
Ser	Ala	Ser	Gly	Val	Ala	Lys	Gln	Met	Tyr	Gln	Asp	Cys	Met	Lys	Asp	435	440	445	
Phe	Gly	Arg	Gly	Leu	Ser	Ser	Gly	Phe	Lys	Tyr	Leu	Glu	Tyr	Glu	Lys	450	455	460	
Lys	His	Gly	Ser	Gly	Asp	Trp	Arg	Leu	Leu	Gly	Asp	Leu	Leu	Pro	Glu	465	470	475	480
Ala	Val	Arg	Phe	Phe	Lys	Glu	Gly	Val	Pro	Gly	Ala	Asp	Met	Leu	Pro	485	490	495	
Gln	Pro	Tyr	Leu	Asp	Ala	Ser	Cys	Pro	Met	Leu	Pro	Thr	Ala	Leu	Val	500	505	510	
Ser	Leu	Ser	Arg	Ala	Pro	Ser	Ala	Pro	Pro	Gly	Thr	Gly	Ala	Leu	Pro	515	520	525	
Pro	Ala	Ala	Pro	Ser	Gly	Arg	Gly	Ala	Ala	Ala	Ser	Leu	Arg	Lys	Arg	530	535	540	
Lys	Ala	Ser	Pro	Glu	Pro	Pro	Asp	Ser	Ala	Glu	Gly	Ala	Leu	Lys	Leu	545	550	555	560
Gly	Glu	Glu	Gln	Gln	Arg	Gln	Gln	Trp	Met	Ala	Asn	Gln	Ser	Glu	Ala	565	570	575	
Leu	Lys	Leu	Thr	Met	Ser	Ala	Gly	Gly	Phe	Ala	Ala	Pro	Gly	His	Ala	580	585	590	
Ala	Gly	Gly	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Leu	Gly	Pro	His	Ser	Asn	595	600	605	
Arg	Thr	Thr	Pro	Pro	Glu	Ser	Ala	Pro	Gln	Asn	Gly	Pro	Ser	Pro	Met	610	615	620	
Ala	Ala	Leu	Met	Ser	Val	Ala	Asp	Thr	Leu	Gly	Thr	Ala	His	Ser	Pro	625	630	635	640

Lys Asp Gly Ser Ser Val His Ser Thr Thr Ala Ser Ala Arg Arg Asn
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Ser Ser Ser Pro Val Ser Pro Ala Ser Val Pro Gly Gln Arg Arg Leu
660 665 670

Ala Ser Arg Asn Gly Asp Leu Asn Leu Gln Val Ala Pro Pro Pro Pro
675 680 685

Ser Ala His Pro Gly Met Asp Gln Val His Pro Gln Asn Ile Pro Asp
690 695 700

Ser Pro Met Ala Asn Ser Gly Pro Leu Cys Cys Thr Ile Cys His Glu
705 710 715 720

Arg Leu Glu Asp Thr His Phe Val Gln Cys Pro Ser Val Pro Ser His
725 730 735

Lys Phe Cys Phe Pro Cys Ser Arg Glu Ser Ile Lys Ala Gln Gly Ala
740 745 750

Thr Gly Glu Val Tyr Cys Pro Ser Gly Glu Lys Cys Pro Leu Val Gly
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Ala Gly Asp Val Lys Val Lys Lys Glu Arg Asp Pro
785 790 795

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<212> PRT
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Arg Leu Leu Pro Gly Arg Pro Leu Pro Arg Ala Ala Ala Ala Gln
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Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
35 40 45

Gln Gln Gln Gln Gln Gln Leu Asn His Val Asp Gly Ser Ser Lys Pro
50 55 60

Ala	Val	Leu	Ala	Ala	Pro	Ser	Gly	Leu	Glu	Arg	Tyr	Gly	Leu	Ser	Ala	65	70	75	80
Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Val	Glu	Gln	Arg	Ser	85	90	95	
Arg	Phe	Glu	Tyr	Pro	Pro	Pro	Pro	Val	Ser	Leu	Gly	Ser	Ser	Ser	His	100	105	110	
Thr	Ala	Arg	Leu	Pro	Asn	Gly	Leu	Gly	Gly	Pro	Asn	Gly	Phe	Pro	Lys	115	120	125	
Pro	Thr	Pro	Glu	Glu	Gly	Pro	Pro	Glu	Leu	Asn	Arg	Gln	Ser	Pro	Asn	130	135	140	
Ser	Ser	Ser	Ala	Ala	Ala	Ser	Val	Ala	Ser	Arg	Arg	Gly	Thr	His	Gly	145	150	155	160
Gly	Leu	Val	Thr	Gly	Leu	Pro	Asn	Pro	Gly	Gly	Gly	Gly	Gly	Pro	Gln	165	170	175	
Leu	Thr	Val	Pro	Pro	Asn	Leu	Leu	Pro	Gln	Thr	Leu	Leu	Asn	Gly	Pro	180	185	190	
Ala	Ser	Ala	Ala	Val	Leu	Pro	Pro	Pro	Pro	Pro	His	Ala	Leu	Gly	Ser	195	200	205	
Arg	Gly	Pro	Pro	Thr	Pro	Ala	Pro	Pro	Gly	Ala	Pro	Gly	Gly	Pro	Ala	210	215	220	
Cys	Leu	Gly	Gly	Thr	Pro	Gly	Val	Ser	Ala	Thr	Ser	Ser	Ser	Ala	Ser	225	230	235	240
Ser	Ser	Thr	Ser	Ser	Ser	Val	Ala	Glu	Val	Gly	Val	Gly	Ala	Gly	Gly	245	250	255	
Lys	Arg	Pro	Gly	Ser	Val	Ser	Ser	Thr	Asp	Gln	Glu	Arg	Glu	Leu	Lys	260	265	270	
Glu	Lys	Gln	Arg	Asn	Ala	Glu	Ala	Leu	Ala	Glu	Leu	Ser	Glu	Ser	Leu	275	280	285	
Arg	Asn	Arg	Ala	Glu	Glu	Trp	Ala	Ser	Lys	Pro	Lys	Met	Val	Arg	Asp	290	295	300	
Thr	Leu	Leu	Thr	Leu	Ala	Gly	Cys	Thr	Pro	Tyr	Glu	Val	Arg	Phe	Lys	305	310	315	320

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Leu Val Ala Asp Asn Ala Gly Gly Ser His Ala Ser Lys Asp Ala Asn		
	85	90 95
Gln Val His Ser Thr Thr Arg Arg Asn Ser Asn Ser Pro Pro Ser Pro		
	100	105 110
Ser Ser Met Asn Gln Arg Arg Leu Gly Pro Arg Glu Val Gly Gly Gln		
	115	120 125
Gly Ala Gly Asn Thr Gly Gly Leu Glu Pro Val His Pro Ala Ser Leu		
	130	135 140
Pro Asp Phe Ser Leu Ala Thr Ser Ala Pro Leu Cys Cys Thr Leu Cys		
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His Glu Arg Leu Glu Asp Asn His Phe Val Gln Cys		
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 <211> 197
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 <213> Homo sapiens

<400> 34

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Ser Pro Met Ala Ala Leu Ile Leu Val Ala Asp Asn Ala Gly Gly Ser
35 40 45
His Ala Ser Lys Asp Ala Asn Gln Val His Ser Thr Thr Arg Arg Asn
50 55 60
Ser Asn Ser Pro Pro Ser Pro Ser Ser Met Asn Gln Arg Arg Leu Gly
65 70 75 80
Pro Arg Glu Val Gly Gly Gln Gly Ala Gly Asn Thr Gly Gly Leu Glu
85 90 95

Pro Val His Pro Ala Ser Leu Pro Asp Ser Ser Leu Ala Thr Ser Ala
100 105 110

Pro Leu Cys Cys Thr Leu Cys His Glu Arg Leu Glu Asp Thr His Phe
115 120 125

Val Gln Cys Pro Ser Val Pro Ser His Lys Phe Cys Phe Pro Cys Ser
130 135 140

Arg Gln Ser Ile Lys Gln Gln Gly Ala Ser Gly Glu Val Tyr Cys Pro
145 150 155 160

Ser Gly Glu Lys Cys Pro Leu Val Gly Ser Asn Val Pro Trp Ala Phe
165 170 175

Met Gln Gly Glu Ile Ala Thr Ile Leu Ala Gly Asp Val Lys Val Lys
180 185 190

Lys Glu Arg Asp Ser
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<210> 35

<211> 197

<212> PRT

<213> Homo sapiens

<400> 35

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Ser Pro Met Ala Ala Leu Ile Leu Val Ala Asp Asn Ala Gly Gly Ser
35 40 45

His Ala Ser Lys Asp Ala Asn Gln Val His Ser Thr Thr Arg Arg Asn
50 55 60

Ser Asn Ser Pro Pro Ser Pro Ser Ser Met Asn Gln Arg Arg Leu Gly
65 70 75 80

Pro Arg Glu Val Gly Gly Gln Gly Ala Gly Asn Thr Gly Gly Leu Glu
85 90 95

Pro Val His Pro Ala Ser Leu Pro Asp Ser Ser Leu Ala Thr Ser Ala
100 105 110

Pro Leu Cys Cys Thr Leu Cys His Glu Arg Leu Glu Asp Thr His Phe
115 120 125

Val Gln Cys Pro Ser Val Pro Ser His Lys Phe Cys Phe Pro Cys Ser
130 135 140

Arg Gln Ser Ile Lys Gln Gln Gly Ala Ser Gly Glu Val Tyr Cys Pro
145 150 155 160

Ser Gly Glu Lys Cys Pro Leu Val Gly Ser Asn Val Pro Trp Ala Phe
165 170 175

Met Gln Gly Glu Ile Ala Thr Ile Leu Ala Gly Asp Val Lys Val Lys
180 185 190

Lys Glu Arg Asp Ser
195

<210> 36

<211> 216

<212> PRT

<213> Homo sapiens

<400> 36

Met Ser Ala Gly Gly Phe Ala Ala Pro Gly His Ala Ala Gly Gly Pro
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Pro Pro Pro Pro Pro Pro Leu Gly Pro His Ser Asn Arg Thr Thr Pro
20 25 30

Pro Glu Ser Ala Pro Gln Asn Gly Pro Ser Pro Met Ala Ala Leu Met
35 40 45

Ser Val Ala Asp Thr Leu Gly Thr Ala His Ser Pro Lys Asp Gly Ser
50 55 60

Ser Val His Ser Thr Thr Ala Ser Ala Arg Arg Asn Ser Ser Ser Pro
65 70 75 80

Val Ser Pro Ala Ser Val Pro Gly Gln Arg Arg Leu Ala Ser Arg Asn
85 90 95

Gly Asp Leu Asn Leu Gln Val Ala Pro Pro Pro Pro Ser Ala His Pro
100 105 110

Gly Met Asp Gln Val His Pro Gln Asn Ile Pro Asp Ser Pro Met Ala

115	120	125
Asn Ser Gly Pro Leu Cys Cys Thr Ile Cys His Glu Arg Leu Glu Asp		
130	135	140
Thr His Phe Val Gln Cys Pro Ser Val Pro Ser His Lys Phe Cys Phe		
145	150	155
Pro Cys Ser Arg Glu Ser Ile Lys Ala Gln Gly Ala Thr Gly Glu Val		
165	170	175
Tyr Cys Pro Ser Gly Glu Lys Cys Pro Leu Val Gly Ser Asn Val Pro		
180	185	190
Trp Ala Phe Met Gln Gly Glu Ile Ala Thr Ile Leu Ala Gly Asp Val		
195	200	205
Lys Val Lys Lys Glu Arg Asp Pro		
210	215	

<210> 37
 <400> 37
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<210> 38
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<210> 39
 <400> 39
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<210> 40
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<210> 41
 <211> 923
 <212> DNA
 <213> Homo sapiens

<400> 41
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130

135

140

Pro Asn Asn Gly Phe Trp Glu Gln Leu Ile Asn Tyr Glu Phe Lys Leu
 145 150 155 160

Phe Asn Asn Asn Thr Val Arg Met Ile Asn Ser Pro Val Gly Asn Ile
 165 170 175

Pro Asp Ile Tyr Glu Lys Asp Leu Arg Thr Met Ile Ser Met
 180 185 190

<210> 43

<211> 570

<212> DNA

<213> Homo sapiens

<400> 43

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 agctttctccc aaataaccag aagcttggtt ctcagcaatg gtgtggccgc caacgacaaa 120
 ctctttctgt ccagcaatcg catcaccgcc attgtcaatg cctcgggtgga agtgggtcaac 180
 gtattcttcg agggcattca gtacataaag gtgcctgta ccgatgctcg tgactcgcgt 240
 ctctaogact tttttgacct cattgctgat cttatccaca ccatcgatat gaggcagggc 300
 cgtacgctgc tgcactgcat ggctggagt agccgttccg cctcactgtg ccttgcgtac 360
 ctcatgaaat accactccat gtcgctgctg gacgcccata catggaccaa gtcgcgcgcg 420
 cccatcatcc ggcccaacaa cggcttttgg gaacagctca tcaattacga attcaagctg 480
 ttttaataaca acaccgtgcg catgatcaac tcgccggtag gtaacatccc tgacatctat 540
 gagaaggacc tacgtacgat gatatcaatg 570

<210> 44

<211> 190

<212> PRT

<213> Homo sapiens

<400> 44

Met Thr Ala Ser Ala Ser Ser Phe Ser Ser Ser Gln Gly Val Gln Gln
 1 5 10 15

Pro Ser Ile Tyr Ser Phe Ser Gln Ile Thr Arg Ser Leu Phe Leu Ser
 20 25 30

Asn Gly Val Ala Ala Asn Asp Lys Leu Leu Leu Ser Ser Asn Arg Ile
 35 40 45

Thr Ala Ile Val Asn Ala Ser Val Glu Val Val Asn Val Phe Phe Glu
 50 55 60

Gly Ile Gln Tyr Ile Lys Val Pro Val Thr Asp Ala Arg Asp Ser Arg
65 70 75 80

Leu Tyr Asp Phe Phe Asp Pro Ile Ala Asp Leu Ile His Thr Ile Asp
85 90 95

Met Arg Gln Gly Arg Thr Leu Leu His Cys Met Ala Gly Val Ser Arg
100 105 110

Ser Ala Ser Leu Cys Leu Ala Tyr Leu Met Lys Tyr His Ser Met Ser
115 120 125

Leu Leu Asp Ala His Thr Trp Thr Lys Ser Arg Arg Pro Ile Ile Arg
130 135 140

Pro Asn Asn Gly Phe Trp Glu Gln Leu Ile Asn Tyr Glu Phe Lys Leu
145 150 155 160

Phe Asn Asn Asn Thr Val Arg Met Ile Asn Ser Pro Val Gly Asn Ile
165 170 175

Pro Asp Ile Tyr Glu Lys Asp Leu Arg Met Met Ile Ser Met
180 185 190

1004430E 1004430E